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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,490	10/27/2003	Kenji Nakano	F47-162747M/MTV	3133
21254	7590	11/25/2005	EXAMINER	
MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817			PARSONS, THOMAS H	
			ART UNIT	PAPER NUMBER
			1745	

DATE MAILED: 11/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/693,490

Applicant(s)

NAKANO ET AL.

Examiner

Thomas H. Parsons

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities:

Page 2, lines 2-5, the text "...liquid would ...leak to...the storage battery such as a filter chamber in which an explosion-proof filter..." appears awkwardly worded;

Page 6, line 10, suggest changing "laminate" to --laminated--; and,

Line 11, suggest changing "member is" to --members are--.

Appropriate correction is required.

### ***Abstract***

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the instant specification exceeds 150 words. Accordingly, the Examiner suggests amending the abstract, as appropriate, to within the range of 50 to 150 words.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uemichi (5,516,602).

**Claim 1:** Uemichi in Figures 3, 4 and 8 discloses an exhaust structure (30) provided on an upper part of a storage battery, comprising:

an exhaust chamber (31, 32, 33), formed with:

an inlet (14), through which gas generated from a cell chamber of the storage battery is introduced;

a first outlet (81), arranged in an upper portion of the exhaust chamber and through which the gas is exhausted to an exterior of the storage battery;

a second outlet (10), arranged in a bottom portion of the exhaust chamber and communicated with the cell chamber; and

side walls (142a, 143a, 91b) and a bottom (43, 44) wall defining the exhaust chamber, the bottom wall (43, 43) being slanted toward the second outlet (10); and

a plurality of plate members (12, 13), which intercepts liquid contained in the gas, each of the plate members being extended from one of the side walls (53) such that a distal end portion faces another one of the side walls (143a, 142a) while defining a gap therebetween, **and being slanted toward the second outlet** so that the intercepted liquid is guided to the second outlet and returned to the cell chamber. See abstract, col. 1: 5-8, col. 1: 25-col. 2: 48, col. 3: 5-10, and col. 3: 37-col. 6: 12.

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Uemichi discloses the claimed invention except for plate members being slanted toward the second outlet. It would have been an obvious design choice to one with ordinary skill in the art at the time the invention was made to modify the plate members such that the plate members slant toward the second outlet, since the Applicants have not disclosed that this particular shape provides any criticality and/or unexpected results and it appears that the invention would perform equally well with any shape such as that taught by Uemichi.

**Claim 2:** As to the recitation “wherein the distal end portion of each of the plate members is bent so as to be directed toward the second outlet”, the rejection is as set forth above in claim 1.

**Claim 3:** Uemichi in Figure 3 discloses that at least one of the side walls (143a, 142a) is slanted toward the second outlet (10). See col. 3: 5-10, and col. 3: 37-col. 6: 12.

**Claim 4:** Uemichi in Figure 3 shows that one of the side walls (91b) is formed with the first outlet (81), and top faces of the other side walls are made flat uniformly.

The Examiner has construed “flat uniformly” to mean that the side walls have a flat surface even though they are slanted.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas H. Parsons whose telephone number is (571) 272-1290. The examiner can normally be reached on M-F (7:00-4:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas H Parsons  
Examiner  
Art Unit 1745

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**PATRICK JOSEPH RYAN**  
**SUPERVISORY PATENT EXAMINER**